I. DEPENDENCY GRAMMAR

In essence, Latin words and constructions have one modification: one syntactic relationship with another word or structure within the sentence: e.g. an adjective modifies its noun, a nominative subject modifies its verb, a purpose clause modifies a verbal form in its main clause, et cetera. A form is dependent on the word or structure that it modifies, and this dependency is visualized by hanging (dépendere) the word from the word or structure that it modifies.

Crucially, word order in Latin is both semantic and syntactic, so the Latin must be constructed with the left to right sequence foremost, with each syntactic expectation resolved by connection to the needed form in sequence within its own clause or level of subordination.\(^1\) Similarly, the semantic force of verbal (and other) forms directs the reading of many of the forms that modify them: e.g. only certain verbs will construe with a Complimentary Infinitive; an infinitive modifying a verb that is not from this set of verbs would thus not be a Complimentary Infinitive, no matter how similar the syntax might appear.

It is important to realize that many of the terms for case usages or types of construction also describe the semantic force of the construction, not just the syntax: the Accusative Direct Object (A-DO) and the Accusative Interior Object (A-INTOBJ) are both accusative (morphologically) adverbial modifiers (syntactically), but their semantic force is distinct, and thus requires a different descriptive tag.

\(^1\) An obvious example of misconstruing syntactic connection based on reading out of sequence is the error of taking the verb of a Relative Clause as the main verb of the sentence. Much less obvious forms of error are avoided by recursively considering the word order in determining modification.
EXAMPLE: *Caesar BG 2.2: His nuntiis litteris -que commotus Caesar duas legiones in citeriore Gallia novas conscripsit et inita aestate in ulteriorem Galliam qui deduceret Q. Pedium [ ] legatum misit.* (Caesar, disturbed by these messages and letters, conscripted two new legions in closer Gaul and, with summer having been entered, he sent Q. Pedius, as legatus, into further Gaul, in order that he lead them.)

- **His** – demonstrative pronoun adjectivally modifying *nuntiis*, ATR (attributive) tag
- **nuntiis** – noun in coordination with *litteris* modifying *commotus*, AB-CAUSE (Ablative of the Cause) tag and _CO (coordinated) subtag
- **litteris** – noun in coordination with *nuntiis* modifying *commotus*, AB-CAUSE (Ablative of the Cause) tag and _CO (coordinated) subtag
- **-que** – enclitic coordinator coordinates *nuntiis* and *litteris*, COORD (coordinator) tag
- **commotus** – participle adjectivally modifying *Caesar*, ATR (attributive) tag
- **Caesar** – subject of the coordinated predicate [*conscripsit et misit*], N-SUBJ (Subject Nominative) tag
- **duas** – numeral adjectivally modifying *legiones*, ATR (attributive) tag
- **legiones** – Direct object of *conscripsit*, A-DO (Accusative Direct Object) tag
- **in** – preposition joining the prepositional phrase [*in citeriore Gallia*] to the verb *conscripsit*, AuxP (preposition) tag
- **citeriore** – adjective adjectivally modifying *Gallia*, ATR (attributive) tag
- **Gallia** – noun indicating where the action of *conscripsit* occurred, AB-LOCAT (Ablative of Location) tag
- **novas** – adjective adjectivally modifying *legiones*, ATR (attributive) tag
- **conscripsit** – part of coordinated predicate [*conscripsit et misit*], PRED (predicate) tag and _CO (coordinated) subtag
- **et** – coordinates *conscripsit* and *misit*, COORD (coordinator) tag
- **inita** – participle within Ablative Absolute construction [*inita aestate*] modifying the verb *misit*, AB-ABSOL (Ablative Absolute) tag
- **aestate** – noun within Ablative Absolute construction [*inita aestate*] modifying the verb *misit*, AB-ABSOL (Ablative Absolute) tag
- **in** – preposition joining the prepositional phrase [*in ulteriorem Galliam*] to the verb *misit*, AuxP (preposition) tag
- **ulteriorem** – adjective adjectivally modifying *Galliam*, ATR (attributive) tag
- **Galliam** – noun indicating toward what where the action of *misit* was directed, A-ORIENT (Accusative of Orientation) tag
- **qui** – subject of *deduceret*, N-SUBJ (Subject Nominative) tag
- **deduceret** main verb of the clause [*qui deduceret*] modifying its antecedent *Pedium*, ADV-RCPURP (Adverbial – Relative Clause of Purpose) tag
- **Q.** – praenomen adjectivally modifying *Pedium*, ATR (attributive) tag
- **Pedium** – noun in apposition with *legatum*, A-DO (Accusative Direct Object) tag and _AP (apposition) subtag
- **[ ]** – placeholder node added to allow apposition of *Pedium* and *legatum*, APOS (appositional node) tag
- **legatum** – noun in apposition with *Pedium*, A-DO (Accusative Direct Object) tag and _AP (apposition) subtag
- **misit** – part of coordinated predicate [*conscripsit et misit*], PRED (predicate) tag and _CO (coordinated) subtag
II. BASIC INSTRUCTIONS

Create a Perseids Editor Account:
I. in Firefox (or Chrome) go to http://sosol.perseids.org/sosol/signin;
II. follow the instructions to create an account.

Start a New Text for Treebanking:
I. in Firefox (or Chrome) go to http://sosol.perseids.org/sosol/signin;
II. log in by clicking on Tufts icon at left of screen (or the Google+);
III. once logged in, go to your HOME via link at top right;
IV. Click “New Treebank Annotation” at center;
V. Paste the assigned lines together into the text box under “Input Text” at left;
VI. Select the button left of “Latin” under the “Language” header at top right;
VII. Click on “Click to toggle advanced options...” under the blue “Edit” button;
VIII. Select the button next to “JMH Latin Tagset”
IX. Click the blue “Edit” button at right;
X. Wait for the text to be converted to XML code and appear in the editing window.

Load an existing XML file:
I. in Firefox (or Chrome) go to http://sosol.perseids.org/sosol/signin;
II. log in by clicking on Tufts icon at left of screen (or the Google+);
III. once logged in, go to your HOME via link at top right;
IV. Click “New Treebank Annotation” at center;
V. Select the button left of “Latin” under the “Language” header at top right;
VI. Click on “Click to toggle advanced options...” under the blue “Edit” button;
VII. Select the button next to “JMH Latin Tagset”
VIII. Scroll to the bottom left of the window and click the "Browse" button under "From file;IX. select the XML file on your computer and click "Open";
X. Wait for the text to be converted to XML code and appear in the editing window.
Navigating the Treebanking Window:

I. **SAVE YOUR WORK FREQUENTLY** by clicking on the farthest left icon at top right (it will be red when there is work that can be saved);

II. “Undo” and “Redo” buttons are immediately to the right of the “Save” button **at top right**;

III. when a word is selected, typing “w” will select the next word, and typing "e" will select the previous word

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Editing the Tree:

I. click on a word to select it (highlights in yellow); click on same word to de-select, OR

II. click on another word to make the selected 1st word dependent on the about to be clicked 2nd word.

III. at top left of tree window, you can see how many words still need to be connected; you can click on the numbers to highlight all unused words.
Editing the Morphology:
I. click on a word to select it (highlights in yellow); click on same word to de-select OR
II. click on the “morph” tab at top right
III. click on the correct morphological analysis; BE SURE, DO NOT GUESS
   a. consult section V for how to add a word use the entries for each lemma within Logeion and/or Perseus to make sure that the form selected is from the correct word; there may be many morphological possibilities listed, but only one is correct.
IV. type “w” to move to the next word, or type "e" to move back to the previous word.
V. It is best to go in sequence through all the words so that none are missed; make sure that the selected morphology matches the structure of the tree and the intended syntax.
Editing the Syntax:

I. click on a word to select it (highlights in yellow); click on same word to de-select OR

II. click on the “relation” (syntactic relationship) tab at top right

III. pull down to the correct syntactic analysis

IV. type “w” to move to the next word, or type "e" to move back to the previous word.

V. It is best to go in sequence through all the words so that none are missed; make sure that the selected syntax matches the structure of the tree and the intended morphology.
### III. MORPHOLOGICAL TAG-SET LIST

#### First (Left-Hand) Pull-Down Menu

<table>
<thead>
<tr>
<th>BASIC</th>
<th>PRED</th>
<th>Predicate</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRED-HORT</td>
<td>Hortatory Subjunctive Predicate</td>
<td></td>
</tr>
<tr>
<td>PRED-DELIB</td>
<td>Deliberative Subjunctive Predicate</td>
<td></td>
</tr>
<tr>
<td>PRED-POTENT</td>
<td>Potential Subjunctive Predicate</td>
<td></td>
</tr>
<tr>
<td>PRED-OPT</td>
<td>Optative Subjunctive Predicate</td>
<td></td>
</tr>
<tr>
<td>INTRJ</td>
<td>Interjection</td>
<td></td>
</tr>
<tr>
<td>PARENTH</td>
<td>Parenthesis (i.e. an aside to the audience external to the syntax of the sentence)</td>
<td></td>
</tr>
<tr>
<td>AUX</td>
<td>(Auxiliary words and punctuation)</td>
<td></td>
</tr>
<tr>
<td>AUX-C</td>
<td>Subordinating Conjunction</td>
<td></td>
</tr>
<tr>
<td>AUX-P</td>
<td>Preposition</td>
<td></td>
</tr>
<tr>
<td>AUX-V</td>
<td>Auxiliary Verb</td>
<td></td>
</tr>
<tr>
<td>AUX-Y</td>
<td>Sentence Adverbial</td>
<td></td>
</tr>
<tr>
<td>AUX-G</td>
<td>Bracketing Punctuation (’ ‘ [ ( - )</td>
<td></td>
</tr>
<tr>
<td>AUX-K</td>
<td>Final Punctuation (, ! ?)</td>
<td></td>
</tr>
<tr>
<td>AUX-X</td>
<td>Comma (or other non-final punctuation , ; :)</td>
<td></td>
</tr>
<tr>
<td>ATR</td>
<td>Attribute (i.e. adjectival modification)</td>
<td></td>
</tr>
<tr>
<td>ADV</td>
<td>Adverb (i.e. true morphological adverbs and indeclinable adverbials)</td>
<td></td>
</tr>
<tr>
<td>COORD</td>
<td>Coordinating Conjunction or element</td>
<td></td>
</tr>
<tr>
<td>APOS</td>
<td>Apposition</td>
<td></td>
</tr>
</tbody>
</table>

#### Nominative

<table>
<thead>
<tr>
<th>N-SUBJ</th>
<th>Subject Nominative</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-PRED</td>
<td>Predicate Nominative</td>
</tr>
</tbody>
</table>

#### Genitive

<table>
<thead>
<tr>
<th>G-POSS</th>
<th>Genitive of Possession</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-PART</td>
<td>Partitive Genitive</td>
</tr>
<tr>
<td>G-OBJEC</td>
<td>Objective Genitive</td>
</tr>
<tr>
<td>G-DESC</td>
<td>Genitive of Description</td>
</tr>
<tr>
<td>G-CHAR</td>
<td>Genitive of Characteristic</td>
</tr>
<tr>
<td>G-VALUE</td>
<td>Genitive of Value</td>
</tr>
<tr>
<td>G-MATER</td>
<td>Genitive of Material</td>
</tr>
<tr>
<td>G-CHARGE</td>
<td>Genitive of the Charge</td>
</tr>
</tbody>
</table>

#### Dative

<table>
<thead>
<tr>
<th>D-IO</th>
<th>Indirect Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-INTER</td>
<td>Dative of Interest</td>
</tr>
<tr>
<td>D-POSS</td>
<td>Dative of Possession</td>
</tr>
<tr>
<td>D-REFER</td>
<td>Dative of Reference</td>
</tr>
<tr>
<td>D-AGENT</td>
<td>Dative of Agent</td>
</tr>
<tr>
<td>D-PURP</td>
<td>Dative of Purpose</td>
</tr>
</tbody>
</table>

#### Accusative

<table>
<thead>
<tr>
<th>A-DO</th>
<th>Direct Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-INTOBJ</td>
<td>Interior Object</td>
</tr>
<tr>
<td>A-PRED</td>
<td>Predicate Accusative</td>
</tr>
<tr>
<td>A-SUBJ</td>
<td>Accusative Subject</td>
</tr>
<tr>
<td>A-ORIENT</td>
<td>Accusative of Orientation</td>
</tr>
<tr>
<td>A-EXTENT</td>
<td>Accusative of Extent</td>
</tr>
<tr>
<td>A-RESPECT</td>
<td>Accusative of Respect</td>
</tr>
<tr>
<td>A-ADVERB</td>
<td>Adverbal Accusative</td>
</tr>
<tr>
<td>A-EXCLAM</td>
<td>Accusative of Exclamation</td>
</tr>
</tbody>
</table>
### Ablative

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB-ORIENT</td>
<td>Ablative of Orientation</td>
</tr>
<tr>
<td>AB-SEPAR</td>
<td>Ablative of Separation</td>
</tr>
<tr>
<td>AB-CAUSE</td>
<td>Ablative of Cause</td>
</tr>
<tr>
<td>AB-AGENT</td>
<td>Ablative of Agent</td>
</tr>
<tr>
<td>AB-ABSOL</td>
<td>Ablative Absolute</td>
</tr>
<tr>
<td>AB-COMPAR</td>
<td>Ablative of Comparison</td>
</tr>
<tr>
<td>AB-LOCAT</td>
<td>Ablative of Location</td>
</tr>
<tr>
<td>AB-RESPECT</td>
<td>Ablative of Respect</td>
</tr>
<tr>
<td>AB-ACCOMP</td>
<td>Ablative of Accompaniment</td>
</tr>
<tr>
<td>AB-DESCRIP</td>
<td>Ablative of Description</td>
</tr>
<tr>
<td>AB-MEANS</td>
<td>Ablative of Means</td>
</tr>
<tr>
<td>AB-MANN</td>
<td>Ablative of Manner</td>
</tr>
<tr>
<td>AB-PRICE</td>
<td>Ablative of Price</td>
</tr>
<tr>
<td>AB-DEGDIF</td>
<td>Ablative of Degree of the Difference</td>
</tr>
</tbody>
</table>

### Vocative

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-VOC</td>
<td>Vocative</td>
</tr>
</tbody>
</table>

### Locative

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-LOCAT</td>
<td>Locative</td>
</tr>
</tbody>
</table>

### Adjectival Clause

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ-RC</td>
<td>Relative Clause</td>
</tr>
<tr>
<td>ADJ-RCCCHAR</td>
<td>Relative Clause of Characteristic</td>
</tr>
<tr>
<td>ADJ-RCINDSTAT</td>
<td>Relative Clause in Indirect Statement</td>
</tr>
</tbody>
</table>

### Adverbiacl Clause

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV-PURP</td>
<td>Purpose Clause</td>
</tr>
<tr>
<td>ADV-RESULT</td>
<td>Result Clause</td>
</tr>
<tr>
<td>ADV-CONSEC</td>
<td>Consecutive Clause</td>
</tr>
<tr>
<td>ADV-PROTAS</td>
<td>Conditional Protasis</td>
</tr>
<tr>
<td>ADV-TEMPOR</td>
<td>Temporal Clause</td>
</tr>
<tr>
<td>ADV-CIRCUMS</td>
<td>Circumstantial Clause</td>
</tr>
<tr>
<td>ADV-CAUSAL</td>
<td>Causal Clause</td>
</tr>
<tr>
<td>ADV-CONCESS</td>
<td>Concesive Clause</td>
</tr>
<tr>
<td>ADV-COMPAR</td>
<td>Clause of Comparison</td>
</tr>
<tr>
<td>ADV-PROVISO</td>
<td>Proviso Clause</td>
</tr>
<tr>
<td>ADV-RCPURP</td>
<td>Relative Clause of Purpose</td>
</tr>
<tr>
<td>ADV-RCRESULT</td>
<td>Relative Clause of Result</td>
</tr>
<tr>
<td>ADV-RCCONDIT</td>
<td>Conditional Relative Clause</td>
</tr>
</tbody>
</table>

### Nominal Clause

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM-SUBST</td>
<td>Substantive Noun Clause (aka Indirect Command)</td>
</tr>
<tr>
<td>NOM-FEARCL</td>
<td>Fear Clause</td>
</tr>
<tr>
<td>NOM-INDQUES</td>
<td>Indirect Question</td>
</tr>
<tr>
<td>NOM-INDSTAT</td>
<td>Indirect Statement</td>
</tr>
<tr>
<td>NOM-DIRSTAT</td>
<td>Direct Statement</td>
</tr>
<tr>
<td>NOM-DS-HORT</td>
<td>Direct Statement Hortatory Subjunctive</td>
</tr>
<tr>
<td>NOM-DS-DELIB</td>
<td>Direct Statement Deliberative Subjunctive</td>
</tr>
<tr>
<td>NOM-DS-POTENT</td>
<td>Direct Statement Potential Subjunctive</td>
</tr>
<tr>
<td>NOM-DS-OPT</td>
<td>Direct Statement Optative Subjunctive</td>
</tr>
</tbody>
</table>

### Infinitive Uses

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INF-COMP</td>
<td>Complimentary Infinitive</td>
</tr>
<tr>
<td>INF-HIST</td>
<td>Historical Infinitive</td>
</tr>
<tr>
<td>INF-EXPL</td>
<td>Explanatory Infinitive</td>
</tr>
<tr>
<td>INF-PURP</td>
<td>Infinitive of Purpose</td>
</tr>
<tr>
<td>INF-EXCLAM</td>
<td>Exclamatory Infinitive</td>
</tr>
</tbody>
</table>
Latin Treebanking Instructions

Second (Right-Hand) Pull-Down Menu

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CO  No secondary tag

CO  Coordinated element (an element hanging under a COORD tag that is coordinated with other element(s))

AP  Element in Apposition (an element hanging under a APOS tag that is in apposition to other element(s))

SBJ  Clause functioning as a Subject

SBJ-CO  Clause in Coordination functioning as a Subject

AP  Clause in Apposition functioning as a Subject

PRED  Clause functioning as a Predicate

PRED-CO  Clause in Coordination functioning as a Predicate

PRED-AP  Clause in Apposition functioning as a Predicate

OBJ  Clause functioning as an Object

OBJ-CO  Clause in Coordination functioning as an Object

OBJ-AP  Clause in Apposition functioning as an Object
IV. TAG-SET INSTRUCTIONS

A. Substantives (nouns, pronouns, and adjectives functioning as nouns) are labeled with the appropriate tag for their particular case usage: e.g. an accusative adjective functioning as a Direct Object uses the A-DO tag.

Adjectives that modify other words – use the ATR (attribute) tag. The adjective is just agreeing with its head; it is not the Direct Object, for example.2

Adjectival use of pronouns – use the ATR (attribute) tag: e.g. ille canis.

B. Subordinated Clauses (nominal, adjectival, and adverbial clauses) are labeled on the highest verbal form in the clause with the appropriate tag for their particular clause usage found in the “adjectival clause,” “adverbial clause,” or “nominal clause” pull-down menus: e.g. a Purpose Clause uses the ADV-PURP tag found in the “adverbial clause” pull-down menu. Nominal clauses must also be labeled with the appropriate functional tag in the second (right hand) pull-down menu ( OBJ, SBJ, PRED): e.g. an Indirect Statement functioning as an Object uses the NOM-INDSTAT tag with the OBJ modifier in the second (right hand) pull-down menu.

Subordinating Conjunctions – use the AuxC (subordinator) tag in the “AUX” pull-down menu: e.g. cum, dummodo, etśī, modo, nē, nisi, quam, quamquam, quamvīs, quandō, quasi, quia, quod, quoniam, sī, sīn, sīve, tametsī, tamquam, unde, ut, utī, velut. Note that some words can be used as prepositions AuxP or as subordinators AuxC: e.g. cum.4

C. Coordination – coordinating conjunctions are labeled with the COORD tag. The elements that are so coordinated (linked under the coordinator) are labeled with the _CO tag in the second (right hand) pull-down menu, in addition to their own proper tag in the first (left hand) pull-down menu: (e.g. conjunctive: et, atque, ac, -que; adverative: sed, at; disjunctive: aut, vel, -ve). In the case of the combined forms (ne)-que, (ne)-c, the ne is adverbial (ADV) typically modifying a verbal form, and the enclitic -que, -c functions as a coordinator (COORD).

Asyndeton – frequently, Latin authors do not use coordinating conjunctions. In these instances, the editor of the text has usually added commas, which can be used in place of conjunctions in the tree and labeled with the COORD tag. If no commas are available, add an ellipsis with the coordinator et within parentheses (cf. section E below) to represent the coordination: i.e. (et).

Polysyndeton – frequently, Latin authors use more coordinating conjunctions than strictly required. The “extra” coordinators have an adverbial force, conveying something like “and even” or “also.” In these instances, the “extra” coordinators are adverbial in function and should be labeled with the ADV tag: e.g. the second and third coordinators in “et... et... que.”

“Nested” Coordination – frequently, Latin authors create larger structures (often balanced) using coordinating conjunctions to group some elements of the coordination more closely than others. In these instances, the “extra” coordinators are dependent on another coordinator and function as true coordinators (COORD) of other coordinated elements: e.g. A et B aut C et D (A is directly coordinated to B, but not to C; the unit AB is coordinated to the unit CD).

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2 Pronouns functioning adjectivally are also labeled with the ATR tag: e.g. gō dīē.
3 A result clause, for example, would be labeled on the verb under the “ut”, not on the “ut” itself.
4 Subordinating conjunctions are often adverbial (not morphological adverbs) in nature, effectively modifying the main verb of the subordinate clause. Unlike, for instance, relative pronouns, these subordinating conjunctions do not decline and thus their subordinating function is more important that their case (in most instances a fossilized case usage).
Differential Emphasis in Coordination – The various coordinators do not have the same semantic force, particularly in the case of *atque/ac*, which conveys more the sense of “and indeed” than the unmarked “and” conveyed by *et*. For example, the earlier (often two) elements will be coordinated by *et*, while the final (often more elaborated) element will be coordinated with *atque*: the first two elements are coordinated, and that combined unit is coordinated with the more strongly emphasized (by *atque*) final element.

Sentence Connecting Coordinators – Latin sentences often begin with the coordinators *et* or *sed* functioning to join the sentence to the ideas of the previous sentence. In these instances, that coordinator is placed directly under the ROOT and should be labeled with the _COORD_ tag. The predicate is placed under the sentence connecting coordinator and does not use a _CO_ tag in the second (right hand) pull-down menu.

D. Apposition – When two (or more) elements are in apposition (the element(s) later in sequence rename the first element) they are labeled with the _AP_ tag in the second (right hand) pull-down menu, in addition to their own proper tag in the first (left hand) pull-down menu: e.g. A-DO_AP

Nota Bene – in Latin, there is no word that signals apposition, and thus there is nothing specific from which to hang the forms in apposition. In these instances, if the editor of the text has added a comma or other punctuation, this can be used to join the elements in apposition in the tree and the comma is labeled with the _APOS_ tag. If there is no comma that can be used, it is necessary to create an ellipsis (cf. section E below) using a pair of square brackets with a single space between them to stand for an appositional node: i.e. [ ].

E. Ellipsis – Latin authors frequently do not repeat verbs that would be used in parallel clauses, they omit forms of *esse*, or do not use coordination. These instances are not mistakes; the forms are just not necessary, and would even harm the stylistics of the author - were they present. For the sake of clarity, however, such forms are represented in the tree with an ellipsis character. (DO NOT ADD UNNECESSARY ELLIPSES.)

Add an Ellipsis character:
1. Click the “aT” tab at the top right of the editor window;
2. click the “Create” button;
3. click the cross-hairs button under “Insertion Point”;
4. select the word or punctuation next to the place where the “elided” word would have been, and click the arrow at right to select in front of or behind the selected word;
5. fill in the appropriate form within parentheses: e.g. *(est)*, *(et)*, or use empty square brackets [ ] for an apposition or coordination;
6. click the “Add Token” button;
7. link the ellipsis character to the tree as if it were the “missing” element.

F. Modification of a Coordinated Structure – When an adjective, _Subject Nominative_, or other modifier modifies all parts of a coordinated structure, it is dependent on (hangs under) the coordinator, indicating that it modifies all of the coordinated forms hanging under the coordinator and marked with the _CO_ tag.
Ablative Absolutes – the noun is placed under (hangs from) the verbal adjective; both are labeled with the **AB-ASOL** tag in the “ablative” pull-down menu: e.g. *Caesare dicente – Caesare* is placed under *dicente*. If there is no participle, place the adjective or title under the name or pronoun: e.g. *me consul – consul* is placed under *me; Caesare vivō – vivō* is placed under *Caesare*.

Adjectives with “Unusual” Cases or Constructions – There are a few Latin adjectives and participles that routinely attract standard uses of specific cases or constructions, *exemplī gratiā*:

- **dignus** – typically attracts an Ablative of Respect **AB-RESPECT** to express in respect to what factor something is worthy
- **parātus** – typically attracts a Complimentary Infinitive **INF-COMP** to express what something is prepared to do
- **plēnus** – typically attracts a Partitive Genitive **G-PART** to express what something is full of, or an Ablative of Means **AB-MEANS** to express what something is filled with.
- **similis** – typically attracts a Dative of Reference **D-REFER** to express what something is similar to, or a Genitive of Possession **G-POSS** to express what something is a representation of.

Adverbs and Adverbials – use the **ADV** (adverbial) tag in the “BASIC” pull-down menu. Use this tag for true morphological adverbs like *sevērē* or *tristiter*, as well as for words of obscured origin like *diū* and fossilized adverbial accusatives like *sensim*: e.g. *adeo, etiam, ita, item, nec, non, nondum, numquam, nunc, omnino, praecipue, quantum, quasi, quoque, statim, tantum, tunc, and umquam*. Adverbial forms most frequently modify verbal forms, but they may modify adjectives, nouns, and even other adverbial forms.

1. Adverbial uses of case forms are normally neuter.

**Aposiopesis** – a sentence may be broken off abruptly for rhetorical or dramatic effect, which is termed an *aposiopesis*. Use a pair of square brackets with the word "aposiopesis" and a single space before and after it to stand for the missing syntactic elements: i.e. *[ aposiopesis ]*. This symbol can be labeled with the appropriate tag for a missing sentence element: e.g. a verbal form, Direct Object, or clause.

Case Usage – Consult Logeion (and/or other dictionaries) to see what cases and constructions normally construe with a particular verb – CHECK THE SEMANTIC/SYNTACTIC USAGES OF A WORD IN THE DICTIONARIES. Remember that the cases have particular basic meanings that are not interchangeable; do not be misled by the syntax of the English verb – LATIN SYNTAX OFTEN DIFFERS SIGNIFICANTLY FROM THE ENGLISH SYNTAX.

Case Usage Terminology – I have worked carefully to create a tagset that can describe all unique syntactic relationships while maintaining the greatest possible simplicity. For this reason, common terms that do not describe syntactically or semantically different relationships are mostly elided: e.g. the Ablative of the Time at Which and the Ablative of the Place at Which are not different types of Ablative usage - the ablative content of such a usage only indicates location, but it is the semantic force of the particular word that indicates time or place: e.g. *horā* could be called Ablative of the Time at Which only because the word *hora* has to do with time. All such ablative usages are thus tagged with the Ablative of Location tag: **AB-LOCAT**. Below is a list of case usage terminology in common use in relation to my tagset.

```
<table>
<thead>
<tr>
<th>Subjective Genitive</th>
<th>Genitive of Possession</th>
<th>G-POSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genitive of Definition</td>
<td>Genitive of Description</td>
<td>G-DESC</td>
</tr>
<tr>
<td>Predicate Genitive</td>
<td>Genitive of Characteristic</td>
<td>G-CHAR</td>
</tr>
</tbody>
</table>
```

For forms using productive case usages like “*multo*” (Ablative of the Degree of Difference) and “*multum*” (Adverbial Accusative), use the appropriate case usage tag: A-ADVERB. A productive case usage is a case form that can be normally produced from a word in common usage. *Multus, -a, -um* normally produces both *multo* and *multum* as part of its declension.
The Latin Treebanking Instructions

<table>
<thead>
<tr>
<th>Genitive of the Crime</th>
<th>Genitive of the Charge</th>
<th>G-CHARGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dative of Advantage/Disadvantage</td>
<td>Dative of Interest</td>
<td>D-INTER</td>
</tr>
<tr>
<td>Dative of Separation (e.g. auferō)</td>
<td>Dative of Interest</td>
<td>D-INTER</td>
</tr>
<tr>
<td>Dative of Separation (e.g. absum)</td>
<td>Dative of Reference</td>
<td>D-REFER</td>
</tr>
<tr>
<td>Ethical Dative</td>
<td>Dative of Reference</td>
<td>D-REFER</td>
</tr>
<tr>
<td>Dative of Person Judging</td>
<td>Dative of Reference</td>
<td>D-REFER</td>
</tr>
<tr>
<td>Predicate Dative</td>
<td>Dative of Purpose</td>
<td>D-PURP</td>
</tr>
<tr>
<td>Cognate Accusative</td>
<td>Accusative Internal Object</td>
<td>A-INTOBJ</td>
</tr>
<tr>
<td>Internal Accusative</td>
<td>Accusative Internal Object</td>
<td>A-INTOBJ</td>
</tr>
<tr>
<td>Object Compliment</td>
<td>Predicate Accusative</td>
<td>A-PRED</td>
</tr>
<tr>
<td>Accusative of Place Toward Which</td>
<td>Accusative of Orientation</td>
<td>A-ORIENT</td>
</tr>
<tr>
<td>Accusative of Purpose</td>
<td>Accusative of Orientation</td>
<td>A-ORIENT</td>
</tr>
<tr>
<td>Accusative of Duration of Time</td>
<td>Accusative of Extent</td>
<td>A-EXTENT</td>
</tr>
<tr>
<td>Accusative of Extent of Space</td>
<td>Accusative of Extent</td>
<td>A-EXTENT</td>
</tr>
<tr>
<td>Ablative of Place from Which</td>
<td>Ablative of Orientation</td>
<td>AB-ORIENT</td>
</tr>
<tr>
<td>Ablative of Origin/Source</td>
<td>Ablative of Orientation</td>
<td>AB-ORIENT</td>
</tr>
<tr>
<td>Ablative of Accordance</td>
<td>Ablative of Orientation</td>
<td>AB-ORIENT</td>
</tr>
<tr>
<td>Ablative of Time at Which</td>
<td>Ablative of Location</td>
<td>AB-LOCAT</td>
</tr>
<tr>
<td>Ablative of Time Within Which</td>
<td>Ablative of Location</td>
<td>AB-LOCAT</td>
</tr>
<tr>
<td>Ablative of Place at Which</td>
<td>Ablative of Location</td>
<td>AB-LOCAT</td>
</tr>
<tr>
<td>Ablative of Attendant Circumstances (instr)</td>
<td>Ablative of Manner</td>
<td>AB-MANN</td>
</tr>
<tr>
<td>Ablative of Attendant Circumstances (loc)</td>
<td>Ablative of Accompaniment</td>
<td>AB-ACCOMP</td>
</tr>
</tbody>
</table>

Clause of Comparison – The clause of comparison will be dependent on the comparative form within its main clause, an adverbial form like sīc, or it will be dependent on the verbal form that it compares the manner of action with. Use the AuxC (subordinating conjunction) tag in the “BASIC” pull-down menu for the subordinator: e.g., ac, quasi, quam, tamquam, ut. Use the ADV-COMPAR (Clause of Comparison) tag for the highest verbal form within the clause; note that a clause of comparison usually does not have an explicit verbal form within it; it is commonly necessary to add the appropriate verbal form that is understood from the context by adding a form in parentheses (e.g. (est) ) using the procedure in section E. (In addition to comparative adjectives and adverbs, there are many other forms that have an idea of comparison or specification: e.g. aliter, alius, ante, post, sīc, et cetera.)

Correlatives – The indefinite correlative (and its clause) is dependent on the demonstrative correlative: qualis is dependent on talis. The "Q" form explains the exact semantic force of the "T" form.

Dates – The date may be expressed simply by an Ablative of Location arranged before a prepositional phrase with ante and an Accusative of Orientation using Kalendae, Nōnnae, or İ̀dūs: e.g. tertīō diē ante Kalendās ĭānuārīās or elided as tertīō Kalendās ĭānuārīās. (The names of the months are adjectives that depend on the Kalendae, Nōnnae, or İ̀dūs and are tagged with ATR.) Similarly, prīdīē and postrīdīē are used as Ablative of Location followed by an Accusative of Orientation: e.g. prīdīē Kalendās ĭānuārīās. The standard formulation of the date in many authors is effectively ungrammatical and may result from transpositions of ante coupled with reanalysis of diē into diem: e.g. ante diem III Kalendās ĭānuārīās. The element [ ante diem ] functions as an indeclinable phrase, even being employed as “object” of other prepositions: e.g. ex ante diem III Kalendās ĭānuārīās (from the third day before the January Kalends).

Direct Statement (sustained without a subordinating verbal form within the sentence) – In extended directly quoted speeches, it is typical to not repeat the subordinating verbal form as the Predicate: e.g. inquit. In these instances, the last explicit verbal form should be carried forward as an ellipsis in the following sentences, using the procedure in Section E: e.g. (inquit) as the Predicate using the PRED tag.
1. Place any final punctuation related to the Direct Statement on the highest element of that clause.
2. If a section of the text that is set in direct speech is longer than 5-6 sentences, just treebank the sentence that includes the verb of saying with the subordinated indirect or direct speech, and treebank the remaining sentences as ordinary predicates.

3. If the quoted speech uses a subjunctive as its main verb (hortatory, deliberative, potential, optative), select the appropriate tag use the tags in the pull-down menu within the NOM-DIRSTAT tag:

- NOM-DS-HORT Direct Statement Hortatory Subjunctive
- NOM-DS-DELIB Direct Statement Deliberative Subjunctive
- NOM-DS-POTENT Direct Statement Potential Subjunctive
- NOM-DS-OPT Direct Statement Optative Subjunctive

and then add the appropriate _OBJ tag in the second pull-down menu.

**Enclitics** – Enclitics should be separated from the preceding word and morphologically identified with their hyphen: e.g. –que, -ve, -ne, -c. These are semantically distinct words that will be needed to correctly form the syntactic tree. Enclitic forms that are no longer productive in preserved Latin (i.e. those not able to be joined to any word like -pte or the -ce in haec) should not be separated.

**Genitive describing/specifying** – The adjectival force of the Genitive may be foremost, with the effect of describing or specifying what type of thing it limits: e.g. liber légum Genitive of Description G-DESC. When the genitive word describes the material from which the limited object is made, the more specific Genitive of Material G-MATER is used: e.g. annulus aurī. Some examples of this use of the genitive are sometime termed a genitive of definition or specification.

**Indirect Statement (sustained or implied without a subordinating verbal form within the sentence)** – In extended speeches, it is typical to not repeat the subordinating verbal form as the Predicate: e.g. dicit. In these instances, the last explicit verbal form should be carried forward as an ellipsis in the following sentences, using the procedure in Section E: e.g. (dicit) as the Predicate using the PRED tag.

1. Verbal adjectives used as periphrastic verb within *Indirect Speech* will agree with their (typically accusative) *Subject*.

**Infinitives** – use the appropriate tag in the “infinitive uses” pull-down menu to label these neuter, verbal nouns:

- INF-COMP Complimentary Infinitives (functioning as the *Direct Objects* of certain verbs)
- INF-HIST Historical Infinitives (functioning as the *Predicate*)
- INF-EXPL Explanatory Infinitives (modifying certain adjectives)
- INF-PURP Infinitives of Purpose (functioning as the *Direct Objects* of certain verbs)
- INF-EXCLAM Exclamatory Infinitives (an exclamation in *Indirect Speech*)
- N-SUBJ Subject Infinitives (functioning as the *Subjects* of certain verbs, especially of impersonal verbs.)

**Interjections** – Distinct from sentence adverbials (e.g. inferential particles like igitur), interjections are somewhat separate from the syntactic structure of the sentence, much like a *Vocative* form: e.g. attatae, ecce, en, euge, eugepae, euhoe, hahaha, hem, heu, papae, st, vae. Interjections typically hang from the *predicate*, or sometimes a subordinated verbal form. Use the **INTRJ** (interjection) tag in the “BASIC” pull-down menu to label the interjection.

1. *Accusative* forms used as interjections (e.g. malum) are accusatives of exclamation and are labeled with the **A-EXCLAM** tag, and *Vocative* forms invoking a god (e.g. Hercule, mehercule) are labeled with the **V-VOC** tag.

2. When paired with a *Vocative* form, the interjection will hang below the *Vocative*. 
licet – When licet is used as the main verb of a subordinate clause, it will normally be a concessive clause: allowed that X is the case although. Use the **ADV-CONCESS** tag in the pull-down menu to label licet, and use the appropriate tag to label its subject - usually an infinitive or a substantiv clause.

Locatives – use the **L-LOCAT** tag in the pull-down menu. A noun in the locative case functions like an Ablative of Location. Locative forms were in common use only for the names of cities, islands, and [ domī, humī, rūrī, forīs, militiae, bellī, animī ]; Locative forms indicating time were [ herī, vesperī, temperī ].

Names – use the **ATTR** (attribute) tag in the “BASIC” pull-down menu to label praenomina and cognomina, which hang from the nomen. The nomen is labeled based on its case function. Any period after the abbreviated prae(nomen) is labeled with **AuxG** and hangs from the prae(nomen). (The nomen is typically an adjective, but the prae(nomen) is a noun, as is sometimes the cognomen. Thus the Basilica Iulia is the Julian Basilica, not the Basilica of Julius: i.e. Basilica Iūliī.) When the author does not include the nomen, it should be added using the ellipsis procedure in Section E above: e.g. Ti. Neronem becomes Ti. (Claudium) Neronem, and both the prae(nomen) Ti. And the cognomen Neronem hang from the nomen (Claudium).

Negation – use the **ADV** (adverbial) tag in the “BASIC” pull-down menu: e.g. nōn, nē, or ni-. Note that some words can be used as negation (ADV) or as subordinators (AuxC): e.g. nē.

ne quidem – use the **ADV** (adverbial) tag in the “BASIC” pull-down menu to label both the ne and the quidem; the ne is dependent on the quidem, which is dependent on whatever work is emphasized: i.e. typically the word between the ne and the quidem.

nescioquis, quívīs, etc written as two words – there are a number of fixed phrases in common use that can be written as a single word or as two words in edited texts: e.g. nescioquis versus nesciō quis, meaning something like aliquis quem nesciō (The verbal form functions as an adjectival modifier of the pronominal form, in effect being a contracted form of a relative clause with the pronominal as its antecedent). Combine such forms into a single word, or use the **ATTR** (attribute) tag in the “BASIC” pull-down menu for the indeclinable element of the compound.

Nominal Clauses – All nominal clauses (NOM-*) must be labeled with the appropriate functional tag from the 2nd pull-down menu: e.g. **OBJ, SBJ, PRED, PRED-CO**.

Nouns with “Unusual” Cases or Constructions – In addition to nouns derived from verbal stems, which typically attract the **OBJ** and **GEN** forms, there are a few Latin nouns that routinely attract standard uses of other cases or constructions; these case usages are congruent with the semantic force of the Latin construction – not the syntax in any potential English translations: exemplī gratiā: opus est – typically attracts an instrumental ablative: Ablative of Means AB-MEANS or Ablative of Manner AB-MANN to express by the work (necessity) must be done.

Ordinal Numbers used Adverbially – use the **ADVERB** tag in the “accusative” pull-down menu, indicating that these accusative, neuter, singular forms modify adverbially: e.g. consul tertium id fēcit (while being consul the third time he made it); tertium does not agree with consul or modify fēcit, but it modifies the verbal idea of being consul.

Parenthetical Statements – Parenthetical statements are complete statements that are not joined to the sentence using coordination or subordination (a grammatically independent structure within another sentence); they are frequently an aside from the speaker embedded within another sentence, much like an Interjection.
Hang the Parenthetical Statement from the first punctuation that separates it from the sentence, and hang the punctuation from the structure in the sentence that occasions the aside – usually a verbal form and often the Predicate. Label the connecting punctuation with the PARENTH tag in the “BASIC” pull-down menu the highest verbal form with the appropriate PRED tag in the “BASIC” pull-down menu. Many apparent asides are, however, abbreviated or atypical Causal Clauses or the like: i.e. they actually explain or otherwise modify the main clause, despite not using a common subordinator.

Periphrastic Verbal Forms – the auxiliary verbal form is taken as being dependent on (hangs under) the verbal adjective in the periphrastic forms. Use the AuxV (auxiliary verbal form) tag in the “BASIC” pull-down menu for finite verbs and infinitives used in a periphrastic verbal form: e.g. futurus est, amatum esse, or amanda sit. Note that the Future Passive Infinitive uses an accusative supine expressing purpose (A-Orient), which is dependent on the infinitive ērī: e.g. nocitum ērī – nocitum is dependent on ērī.

Predicate – if they are indicative, the verb or verbs of the independent clause are labeled with the PRED tag in the “BASIC” pull-down menu; if they are subjunctive, use the tags in the pull-down menu within the PRED tag:

- PRED-HORT hortatory subjunctive
- PRED-DELIB deliberative subjunctive
- PRED-POTENT potential subjunctive
- PRED-OPT optative subjunctive (utinam is tagged with AuxY)

The predicate may be coordinated, like any other structure.

Prepositions – use the AuxP (preposition) tag in the “Aux” pull-down menu located in the “BASIC” pull-down menu: e.g. dē, ad, or inter. Note that some words can be used as prepositions or as adverbials: e.g. “ante”. Remember that the case use attracts certain prepositions; the prepositions do not cause the case. Prepositions may themselves be modified by adverbial forms: e.g. in “usque ad oppidum”, usque (all the way) modifies the idea of “ad” (towards), in “unā cum cēterīs”, unā (at one) modifies the idea of “cum” (with). Label the substantive under the preposition with the appropriate tag for its particular clause usage, almost always Accusative or Ablative and usually (but not always) matching as below:

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Case Usage</th>
<th>Preposition</th>
<th>Case Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ad</td>
<td>Accusative of Orientation</td>
<td>secundum</td>
<td>Accusative of Orientation</td>
</tr>
<tr>
<td>adversus</td>
<td>Accusative of Orientation</td>
<td>sub (motion)</td>
<td>Accusative of Orientation</td>
</tr>
<tr>
<td>adversum</td>
<td>Accusative of Orientation</td>
<td>subter (motion)</td>
<td>Accusative of Orientation</td>
</tr>
<tr>
<td>ante</td>
<td>Accusative of Orientation</td>
<td>super (motion)</td>
<td>Accusative of Orientation</td>
</tr>
<tr>
<td>circum</td>
<td>Accusative of Orientation</td>
<td>suprā</td>
<td>Accusative of Orientation</td>
</tr>
<tr>
<td>cis/citrā</td>
<td>Accusative of Orientation</td>
<td>trāns (position)</td>
<td>Accusative of Orientation</td>
</tr>
<tr>
<td>contrā</td>
<td>Accusative of Orientation</td>
<td>ultrā</td>
<td>Accusative of Orientation</td>
</tr>
<tr>
<td>ergā</td>
<td>Accusative of Orientation</td>
<td>versus</td>
<td>Accusative of Orientation</td>
</tr>
<tr>
<td>extrā</td>
<td>Accusative of Orientation</td>
<td>apud</td>
<td>Accusative of Extent</td>
</tr>
<tr>
<td>in (motion)</td>
<td>Accusative of Orientation</td>
<td>inter</td>
<td>Accusative of Extent</td>
</tr>
<tr>
<td>înfrā</td>
<td>Accusative of Orientation</td>
<td>per</td>
<td>Accusative of Extent</td>
</tr>
<tr>
<td>intrā</td>
<td>Accusative of Orientation</td>
<td>trāns (motion)</td>
<td>Accusative of Extent</td>
</tr>
<tr>
<td>īuxtā</td>
<td>Accusative of Orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ob</td>
<td>Accusative of Orientation</td>
<td>cōram</td>
<td>Ablative of Orientation</td>
</tr>
<tr>
<td>penes</td>
<td>Accusative of Orientation</td>
<td>dē</td>
<td>Ablative of Orientation</td>
</tr>
<tr>
<td>post</td>
<td>Accusative of Orientation</td>
<td>palam</td>
<td>Ablative of Orientation</td>
</tr>
<tr>
<td>pōne</td>
<td>Accusative of Orientation</td>
<td>procul ā/ab</td>
<td>Ablative of Orientation</td>
</tr>
<tr>
<td>praeter</td>
<td>Accusative of Orientation</td>
<td>tenus</td>
<td>Ablative of Orientation</td>
</tr>
<tr>
<td>prope</td>
<td>Accusative of Orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>propter</td>
<td>Accusative of Orientation</td>
<td>ā/ab/abs</td>
<td>Ablative of Orientation</td>
</tr>
</tbody>
</table>

6 Since forms of [ esse ] are often omitted, placing the participle above them in the tree results in uniformity of arrangement between instance where they are present and when they are absent. Further, the main verbal force of the periphrastic verb is contained in the participle, with the form of [ esse ] merely supplying tense and mood, or marking the usage as infinitive.
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- Ablative of Cause (more rare)
  - ē/ex
  - Ablative of Orientation

- Ablative of Cause (more rare)
  - in (location)
  - prae
  - prō
  - sub (location)
  - subter (location)

- Ablative of Location
  - super (location)
  - cum
  - absque
  - sine
  - tenus

Pronouns (used adjectivally) – Pronouns that adjectivally modify another word are tagged with ATR: e.g. eōdem modō.

Punctuation – When not otherwise needed to stand for coordination or apposition within a syntactic tree:
1. Commas (AuxX) and quotation marks (AuxG) are hung from the highest verbal form of the clause that necessitates their existence: e.g. a comma separating a Purpose Clause from the main clause hangs from the highest verbal form of the Purpose Clause, since the comma would not be there except to separate that clause from the Main Clause. (Do not hand them from the AuxC.)
2. Commas between elements in coordination are hung from the coordinator and retain their AuxX tag.
4. Colons and semicolons ( ; : ) that separate clauses or other structures but do not end the sentence (e.g. in a list of statements) are marked with the AuxX tag.
5. Parentheses, brackets, and hyphens are labeled with the AuxG tag.

Quotation Marks – Direct quotation should be surrounded by double quotation marks ( “ ), and a quotation embedded within another quotation should be surrounded by single quotation marks ( ‘ ).

Relative Clause – In most instances, a Relative Clause just functions as an adjectival modifier of its antecedent, in which case it is labeled with the ADJ-RC tag (or other appropriate ADJ-RC... or ADV-RC... tag); however, a Relative Clause frequently stands without an antecedent as an object or subject of a verbal form. In these cases, also use the _OBJ or _SBJ modifier in the second (right hand) pull-down menu: e.g. ADJ-RC_OBJ.
1. Note that not every Relative Clause contains a simple relative pronoun: e.g. clauses subordinated by ubi or clauses containing indefinite relative pronouns like quicumque.

Relative Pronoun – The Relative Pronoun is tagged with the case tag specific to its role within its clause. It hangs from whatever form it is dependent upon due to its particular case usage. Identify the morphology as below:
  - qui1 – Interrogative adjective: qui, quae, quod
  - qui2 – Relative pronoun: qui, quae, quod
  - quis1 – Interrogative pronoun: quis, quid
  - quis2 – Indefinite pronoun: following sī or nē: effectively (ali)quis, (ali)qua, (ali)quid

Result Clause – In most instances, a Result Clause modifies an adverbial or adjectival form in its main clause to clarify that form. It does not typically modify a verbal form like the Purpose Clause does: e.g. tam.

Sentence Coordinators – Coordinators (e.g. et, sed, ac, atque, autem) are often used to link sentences semantically rather than to link structures within a particular sentence. These coordinators often come first
in sequence and depend on the ROOT. The predicate hanging under such a sentence coordinator is not marked with the _CO tag.

ubi – When it is used as a subordinator (AuxC) instead of an adverbial (ADV), ubi frequently sets up a a Relative Clause (of space or, less frequently, time) which modifies its antecedent like any other Relative Clause, with the difference being that it usually does not contain a relative pronoun. The highest verbal form is labeled with the ADJ-RC tag (or potentially another ADJ-RC... or ADV-RC... tag).

Verbs with “Unusual” Cases – In addition to intransitive verbs (those that do not take an accusative Direct Object), there are a few Latin verbs that routinely attract standard uses of other cases or constructions; these case usages are congruent with the semantic force of the Latin verb – not the syntax of the verb in any potential English translations: exemplī gratiā:
auferr – typically attracts a Dative of Interest D-INTER to express who is harmed by the removal of the Direct Object (the dative case cannot express motion away from something; there is no dative of separation).
biber – sometimes construed with an Ablative of Orientation AB-ORIENT (with or without a preposition) to indicate from what vessel something is drunk.
carēr – attracts an Ablative of Separation AB-SEPAR – to be deprived from something. (In pre-classical Latin may attract an Objective Genitive G-OBJEC.)
continēr – finite forms may attract an Ablative of Means AB-MEANS or other instrumental ablative, or a Dative of Reference D-REFER. In the perfect passive participle often attracts an Ablative of Location AB-LOCAT (with or without a preposition) to indicate in what a thing is content (contained), or an Explanatory Infinitive INF-EXPL.
credēr – typically attracts a Dative of Interest D-INTER (person) to express for whom there is confidence; it can also attract an impersonal Direct Object or a Substantive Clause to indicate the thing or concept that is believed to be true.
decē – most frequently used in an impersonal manner with an infinitive or a nominal clause as the Subject and attracts an Accusative Direct Object (person) A-DO to indicate for whom an action is fitting.
dēssēs – most commonly attracts a Dative of Interest D-INTER
displīcēr – attracts a Dative of Refrence (person) D-REFER to express to whom something is displeasing.
doceō – typically attracts an Accusative Direct Object (person) A-DO with an infinitive Interior Object A-INTOBJ to express what content the person is being taught; may occur without the Accusative Direct Object (person) A-DO being explicitly stated.
egēr – attracts either an Ablative of Respect AB-RESPECT – (to be needy in respect to something) or an Objective Genitive G-OBJEC – to be in need of something.
fruēr – attracts an Ablative of Means AB-MEANS or other instrumental ablative – to enjoy oneself by means of something.
fungēr – attracts an Ablative of Means AB-MEANS or other instrumental ablative – to busy oneself with something.
gaudēr – attracts an Ablative of Cause AB-CAUSE (as well as causal clauses and other constructions) – to rejoice because of something.
imperēr – typically attracts a personal Dative Indirect Object D-IO – to give a command to someone.
ibēr – typically attracts a personal Accusative Direct Object A-DO and an infinitive Interior Object A-INTOBJ – to order X to do Y, in the passive X (nominative) is commanded to do Y (still infinitive Interior Object); sometimes attracts a substantive noun clause as Interior Object.
jugēr – typically attracts a Accusative Direct Object A-DO and a Dative of Reference D-REFER – to join something to something else.
libēr – impersonal usage with a nominative demonstrative or relative pronoun, or an infinitive or substantive noun clause as the Subject. Attracts a Dative of Reference D-REFER to indicate for whom something is pleasing.
licēr – attracts a Dative of Reference (person) D-REFER and often an infinitive as its Nominative Subject or a substantive clause as its Subject.
memminīsēr – attracts the Objective Genitive G-OBJEC – to be mindful of something.
miserārī – in poetry often attracts an Objective Genitive G-OBJEC instead of an Accusative Direct Object miserēr – attracts an Objective Genitive G-OBJEC and/or a Direct Object (person).
nasēr – typically construed with an Ablative of Orientation AB-ORIENT (with or without ex or dē, rarely with ab) to indicate from whom a person is engendered: e.g. ıove nātus.
nīlī – typically construed with an Ablative of Location AB-LOCAT or an Ablative of Orientation AB-ORIENT (often with dē) to indicate on or from what something rests or bears.
operēt – takes an Indirect Speech as its Subject.
paentet – an Accusative Direct Object (person) A-DO with an Objective Genitive G-OBJEC to express what the regret concerns.
parcere – attracts a *Dative of Interest* D-INTER to indicate in whose interest mercy is shown.
parēre – typically attracts a *Dative of Interest* D-INTER – to render obedience unto.
pascī – attracts an *Ablative of Means* AB-MEANS or other instrumental ablative – to be glutted by means of something: e.g. *qui maleficio et scelere pascuntur*.
piget – cause someone - *Accusative Direct Object* A-DO - to have a disgust of something - *Objective Genitive* G-OBJEC
placet – attracts a *Dative of Reference* (person) D-REFER and often an infinitive as its *Nominative Subject* to express to whom something is pleasing.
potirī – attracts either an *Ablative of Respect* AB-RESPECT – (to be powerful in respect to something) or an *Objective Genitive* G-OBJEC – (to have the control of something), or an *Accusative Direct Object* A-DO before or after the period of Classical Latin – (to control something).
repugnāre – typically attracts a *Dative of Interest* D-INTER to express who is fought against.
studēre – typically attracts a *Dative of Interest* D-INTER to express for whom or for what something has intense interest.
sufficere – typically attracts a *Dative of Interest* D-INTER to express for whom or for what something is supplied.
taedet – attracts a *Direct Object* (person) A-DO with an *Objective Genitive* G-OBJEC to express what the regret concerns.
uit – attracts an *Ablative of Means* AB-MEANS or other instrumental ablative – to set oneself to work by means of something.
vidēri – attracts a *Dative of Reference* D-REFER to indicate to whom X seems to be Y.

**Vocatives** – use the V-VOC tag in the pull-down menu, indicating that they are not part of the syntactic structure of the tree. A vocative normally depends on the main verbal form of the independent clause.

**AuxY** (sentence adverbials) – many adverbial forms (not generally true morphological adverbs) most often emphasize the sentence (independent clause) as a whole, rather than a particular word within the sentence: *e.g. alias, consequens, certe, contra, enim, ergo, ideo, igitur, immo, inde, ita, item, num, praeterea, propterea, sane, tamen, unde, utrum*, and *vero*. Note that most adverbial forms can be used in multiple manners, although the sentence adverbial (AuxY) usage may predominate. The AuxY most typically depends on the highest verbal form or coordinator, since it usually modifies the entire sentence. A sentence adverbial frequently ties the current sentence into ideas from a prior sentence: *e.g. ergo ≈ "and because of what I just said".*
V. MORPHOLOGY LABELING/EDITING INSTRUCTIONS

A. Label a word based on its morphology, not its function: e.g. a substantive adjective is morphologically an adjective, NOT a noun. (Most of the names of ethnicities/peoples are adjectives: e.g. Rōmānī.)

B. Know what you are looking for before selecting the morphological analysis. (Multiple distinct forms may derive from the same or similar roots; check the dictionary entries to be certain of the correct form.) If the precisely correct form is not present, you must create a new form: (DO NOT ADD UNNECESSARY FORMS.)

Create a new morphological analysis:
1. In the “Morph” tab at the top right of the editor window;
2. click the “Create new form” button;
3. in the “Lemma” box add the first word of the dictionary entry: e.g. Caesar instead of Caesare (in the case of abbreviations, use the complete word: e.g. M. would be Marcus);
4. select the part of speech in the “Part of Speech” pull-down menu (participles, gerundives, gerunds, supines, and infinities are lumped under “verb” and differentiated in the “Mood” drop-down menu);
5. select the properties of the word in the drop-down menus that appear;
6. when all properties are complete, click the “Save” button.

C. Make sure that the selected morphology and the syntactic TAG are in agreement: i.e. do not label consulate AB-ABSOL and then identify the morphology as the dative of consul. (Check in both directions.)

D. The relative, interrogative, and indefinite pronouns and adjectives overlap morphologically in many places. Use the list below to help find the correct form. quīs (an alternate form of the plural abl/dat quibus) or other alternate forms will need to have a new morphological analysis created as in B above.

qui1 – Interrogative adjective: qui, quae, quod
qui2 – Relative pronoun: qui, quae, quod
quis1 – Interrogative pronoun: quis, quid
quis2 – Indefinite pronoun: following sī or nē: effectively (ali)quis, (ali)qua, (ali)quid

E. Enclitics should be separated from the preceding word and morphologically identified with their hyphen: e.g. –que, -ve, -ne, -c.

F. All adjectives and adverbs, including participles have degree. Adverbs that are derived from adjectives use the adjective nominative, singular, masculine in their morphology identification. (Even if an entry exists for a common form like bene, make sure to add an analysis as the positive adverb from the adjective bonus.)

7 All gerunds have no Person, but are singular, present, active/deponent (and neuter); their case cannot be Nominative.
8 All supines have no Person, but are singular, present, active/deponent; their case can only be Accusative or Ablative, with arguably a vanishingly few archaic Dative examples.
9 All Adjectives and Adverbs should have their degree specified; “ordinary” adjectives or adverbs are in the Positive Degree.
VI. EDITING THE XML CODE DIRECTLY
At times the automatic XML parser may make errors. Sometimes you may disagree with the editing choices of the editor of your text: e.g. punctuation, which manuscript reading to use, what word best solves a *crux* (a textual corruption induced problem in syntax). In these situations, you will need to directly edit the XML code. (Note that when you change the numbering of words within a sentence using many of these types of edit, the dependencies in the tree will need to be redone; when a word or punctuation is changed, it may have to be retagged and re-identified.)

EDITING THE XML CODE
I. note which sentence you are currently editing
II. save, and then exit the editor window by clicking on the exit arrow at top right
III. select "EDIT XML" from the options in blue text near top of window
IV. scroll to the appropriate sentence: e.g. sentence 4, then...

Divide a word
I. select the entire word entry, including all brackets

```xml
<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigestaque" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="4" form="ne" lemma="ne1" postag="d--------" relation="ADV" head="24"/>
<word id="5" form="." lemma="punc1" postag="u--------" relation="AuxK" head="0"/>
</sentence>
```

II. copy and paste in another copy of the word entry immediately after the first instance

```xml
<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigestaque" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigestaque" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="4" form="ne" lemma="ne1" postag="d--------" relation="ADV" head="24"/>
<word id="5" form="." lemma="punc1" postag="u--------" relation="AuxK" head="0"/>
</sentence>
```

III. delete the 2nd word from the first entry, AND replace the 1st word in the second entry with a hyphen

```xml
<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
```
Combine two words
I. find the two word entries that should be a single word entry

II. add the letters of the second word entry to the end on the first word, AND delete the second entry

III. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)

Combine two sentences
I. select the entire sentence end tag of the 1st sentence and the entire sentence beginning tag of the 2nd sentence, including all brackets

IV. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)
<word id="2" form="congesta" lemma="congero1" postag="v-prppnn-" relation="ATR" head="19"/>
<word id="3" form="-que" lemma="-que" postag="c-" relation="COORD" head="22"/>
<word id="4" form="eodem" lemma="eodem" postag="d-" relation="ADV" head="12"/>
<word id="5" form="." lemma="punc1" postag="u-" relation="AuxK" head="0"/>
</sentence>

II. delete both tags entirely, including all brackets

<word id="1" form="rudis" lemma="rudis1" postag="a-s-" relation="ATR_CO" head="3"/>
<word id="2" form="indigesta" lemma="indigestus1" postag="a-s-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c-" relation="COORD" head="4"/>
<word id="4" form="moles" lemma="moles" postag="n-s-" relation="N-PRED" head="23"/>
<word id="5" form="." lemma="punc1" postag="u-" relation="AuxK" head="0"/>
</sentence>

III. change punctuation at the end of the 1st sentence if necessary

IV. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)

Separate one sentence into two sentences

I. select the entire sentence end tag of a sentence and the entire sentence beginning tag of the following sentence, including all brackets

<word id="1" form="rudis" lemma="rudis1" postag="a-s-" relation="ATR_CO" head="3"/>
<word id="2" form="indigesta" lemma="indigestus1" postag="a-s-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c-" relation="COORD" head="4"/>
<word id="4" form="moles" lemma="moles" postag="n-s-" relation="N-PRED" head="23"/>
<word id="5" form="." lemma="punc1" postag="u-" relation="AuxK" head="0"/>
II. copy both tags entirely, including all brackets

III. paste both tags entirely, including all brackets, between the final word of the 1st part of the sentence to be divided and the second part

<word id="3" form="-que" lemma="-que" postag="c--------" relation="COORD" head="4"/>
<word id="4" form="moles\' lemma="moles" postag="n-s--fn-" relation="N-PRED" head="23"/>
<word id="5" form="ne" lemma="ne1" postag="d--------" relation="ADV" head="24"/>
<word id="6" form="-c" lemma="-que" postag="c--------" relation="COORD" head="0"/>
<word id="7" form="quicquam" lemma="quisquam" postag="p-s--nn-" relation="N-PRED" head="24"/>
<word id="8" form="ni" lemma="ni" postag="d--------" relation="ADV" head="22"/>
<word id="9" form="-si" lemma="si" postag="c--------" relation="AuxC" head="24"/>
<word id="10" form="pondus\' lemma="pondus" postag="n-s--nn-" relation="N-PRED\_CO" head="13"/>
Add punctuation

I. select the word entry for any punctuation, preferably the type that you want to add

II. copy the word entry for the punctuation

III. paste the word entry for the punctuation between two other word entries where needed

IV. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)
Latin Treebanking Instructions

J. Matthew Harrington Ph.D. – Tufts University

Remove punctuation

I. select the word entry for the punctuation needing to be removed

```
<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c--------" relation="COORD" head="4"/>
<word id="4" form="," lemma="comma" postag="u--------" relation="AuxX" head="0"/>
<word id="5" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="6" form="ne" lemma="ne1" postag="d--------" relation="ADV" head="24"/>
<word id="7" form="." lemma="punc1" postag="u--------" relation="AuxK" head="0"/>
```

II. delete the word entry for the punctuation entirely, including all brackets

```
<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c--------" relation="COORD" head="4"/>
<word id="5" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="6" form="ne" lemma="ne1" postag="d--------" relation="ADV" head="24"/>
<word id="7" form="." lemma="punc1" postag="u--------" relation="AuxK" head="0"/>
```

III. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)

Edit a single word or character

I. select the word or punctuation needing to be edited

```
<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="innigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c--------" relation="COORD" head="4"/>
<word id="5" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="6" form="ne" lemma="ne1" postag="d--------" relation="ADV" head="24"/>
<word id="7" form="." lemma="punc1" postag="u--------" relation="AuxK" head="0"/>
```

II. make any needed edits or substitutions

```
<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
```
Add the line or paragraph numbers to every sentence:
I. In the header of each sentence, find: subdoc=""

```
<sentence id="21"
document_id="urn:cts:latinLit:phi0690.phi003.perseus-lat2"
    subdoc=""
    span="">
    <word id="1" form="Se" lemma="sui" postag="p-p---ma-" relation="A-DO_CO" head="9"/>
    <word id="2" form="quoque" lemma="quoque" postag="d-------" relation="ADV" head="5"/>
    ...
</sentence>
```

II. Consult the line or paragraph numbering in the text and fill in the correct numbers: e.g. subdoc="1.488-489"

tum uero ingentem gemitum dat pectore ab imo, 1.485
ut spolia, ut currus, utque ipsum corpus amici
tendentemque manus Priamum conspexit inermis.
se quoque principibus permixtum agnouit Achiuis,
Eoasque acies et nigri Memnonis arma.
ducit Amazonidum lunatis agmina peltis 1.490
Penthesilea furens mediisque in milibus ardet,
...

```
<sentence id="21"
document_id="urn:cts:latinLit:phi0690.phi003.perseus-lat2"
    subdoc="1.488-489"
    span="">
    <word id="1" form="Se" lemma="sui" postag="p-p---ma-" relation="A-DO_CO" head="9"/>
    <word id="2" form="quoque" lemma="quoque" postag="d-------" relation="ADV" head="5"/>
    ...
</sentence>
```